



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application Number : 10/676,006 Confirmation No.:  
Applicant : Jørn Borch SØE et al.  
Filed : October 2, 2003  
Title : A METHOD OF IMPROVING PROPERTIES OF A FLOUR  
DOUGH, A FLOUR DOUGH IMPROVING COMPOSITION  
AND IMPROVED FOOD PRODUCTS  
TC/Art Unit :  
Examiner: :  
Docket No. : 59191.000009  
Customer No. : 21967

**INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicants respectfully request consideration of the references listed on the attached Form PTO-1449. Copies of these documents are not provided herewith, as this case relies on the benefit of copending U.S. Patent Application Serial No. 09/932,923 under 35 U.S.C. §120, for an earlier priority date and the documents were either submitted in the copending '923 application, or were identified in the copending '923 application as having been cited in the previous application which the copending '923 application claims an earlier filing date under 35 U.S.C. § 120. Accordingly, pursuant to 37 C.F.R. §§1.98 (d)(1)(2) copies of these references are not submitted herewith. However, copies of any of the cited references will be forwarded at the request of the Examiner. Applicants rely on the prior application for an earlier filing date under 35 U.S.C § 120.

Applicants respectfully request that the Examiner consider the references cited on the Form PTO-1449 and that the Examiner indicate that the references have been

considered in this application by returning a copy of the Form PTO-1449 with the Examiner's initials in the left column as per MPEP § 609.

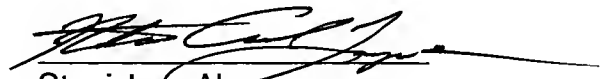
Applicants also wish to bring to the Examiner's attention co-pending U.S. patent applications: U.S. Application Serial Numbers 09/932,923 (which is a Continuation of U.S. Application Serial Number 08/676,186, filed on July 12, 1996, as a national phase of PCT Application PCT/DK96/00239, and issued as U.S. Patent No. 6,358,543); 10/040,394, filed January 9, 2002; 10/150,429, filed May 17, 2002; and 09/824,053, filed April 3, 2001. Applicants submit that the co-pending applications are not material to patentability of any claims in the present case. Nonetheless, Applicants are bringing these applications to the Examiner's attention. Copies of the co-pending patent applications are provided herewith. An indication of consideration of the co-pending applications by the Examiner would be appreciated.

Applicants respectfully note that the submission of the listed references in this Information Disclosure Statement is not an admission that they are prior art or that they are material to patentability of any claims of the application. Also, the submission of this Information Disclosure Statement is not an indication that a search has been made.

This IDS is submitted prior to the issuance of a first Office Action on the merits; therefore, it is believed that no fees are required in connection therewith. If any fees are necessitated by the filing of this Information Disclosure Statement, please charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,  
HUNTON & WILLIAMS

Date: March 3, 2004

  
Stanislaus Aksman  
Registration No. 28,562  
Robert C. Lampe, III  
Registration No. 51,914

1900 K Street, N.W., Suite 1200  
Washington, D.C. 20006-1109  
Ph. (202) 955-1500  
Fax (202) 778-2201



Atty. Docket: 59191.000009

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/676,006
				Filing Date	October 2, 2003
				First Named Inventor	Jørn Borch SØE et al.
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
Sheet	1	of	10	Attorney Docket Number	59191.000009

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
/LW/	U1	2,783,150		Luther	02-26-1957	
/LW/	U2	3,520,702		Merzi	07-14-1970	
/LW/	U3	5,059,430		Bowles	10-22-1991	
/LW/	U4	5,094,951		Rosenberg	03-10-1992	
/LW/	U5	5,108,765		Maat et al.	04-28-1992	
/LW/	U6	5,318,785		DeStefanis	06-07-1994	
/LW/	U7	5,451,413		Fok et al.	09-19-1995	
/LW/	U8	5,650,188		Gaubert et al.	07-22-1997	
/LW/	U9	5,916,607		Mutsaers et al.	06-29-1999	
/LW/	U10	6,039,983		Wagner et al.	03-21-2000	
/LW/	U11	6,251,626		Stougaard et al.	06-26-2001	
/LW/	U12	6,406,723		See et al.	06-18-2002	
/LW/	U13	10/040,394			filed 01-09-2002	
/LW/	U14	10/150,429			filed 05-17-2002	
/LW/	U15	09/932,923			filed 08-21-2001	
/LW/	U16	09/824,053			filed 04-03-2001	

FOREIGN PATENT DOCUMENTS								
Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Country	Translation (Y/N)
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
/LW/	F1	JP	73016612			12-1970	Japan, Great Britain (Abstract)	N
/LW/	F2	JP	73016612** (Japanese Unexamined Patent Publication No. 48- 16612	abstract		12-1970	Japan (Abstract)	Y
/LW/	F3		B1-321-811			06-1989	European Patent specification	N
/LW/	F4		B1-338-452			10-1989	European Patent specification	N

Examiner Signature	/Leslie Wong/	Date Considered	09/13/2007
-----------------------	---------------	--------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

\*\*NOTE: This reference was inadvertently identified as JP7301661 in the Supplemental IDS of April 26, 2001 in the prior application. Nonetheless, it is clear from the context of that IDS that it was in fact JP73016612. The English translation filed was that of JP73016612.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS



TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 10

**Complete if Known**

Application Number	10/676,006
Filing Date	October 2, 2003
First Named Inventor	Jørn Borch SØE et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	59191.000009

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
/LW/	U17	6,358,543		Soe et al	03-19-2002	
	U18					

**FOREIGN PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Country	Translation (Y/N)
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
/LW/	F5		2,102,723			09-1990	Canada	N
/LW/	F6	JP	A92084848			03-1992	Japanese Patent Abstract	N
/LW/	F7		39,483			Apparent filing date 09-12-1994	Chile	N
/LW/	F8	JP	A6296467			1994	Japan (Abstract)	N
/LW/	F9	DE	A1050703			03-26-1956	Germany	N
/LW/	F10	JP	61085158			04-30-1986	Japan (Abstract)	N
/LW/	F11	EP	A0468731			07-22-1991	Europe	N
/LW/	F12		858-1991			3-10-1992	Chile (Patent application)	N
/LW/	F13	EP	0396 162			01-07-1993	Europe	N
/LW/	F14		1376-1992			09-20-1993	Chile	N
/LW/	F15		4301904A1			02-1994	Germany, (English abstract and translation of claims)	Y
/LW/	F16	JP	1994000010444			10-25-1994	Japan (Abstract)	N

Examiner Signature

/Leslie Wong/

Date Considered

09/13/2007

\*EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPD Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Atty. Docket: 59191.000009

Please type a plus sign (+) inside this box →

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0037  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/676,006
				Filing Date	October 2, 2003
				First Named Inventor	Jørn Borch SØE et al.
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
Sheet	3	of	10	Attorney Docket Number	59191.000009

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	U19					
	U20					

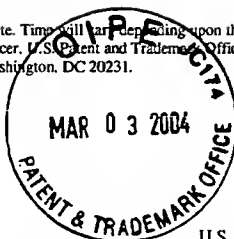
FOREIGN PATENT DOCUMENTS								
Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Country	Translati on (Y/N)
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
/LW/	F17	WO	A9501727			01-19-1995	Europe	N
/LW/	F18	JP	07274807A			10-24-1995	Japan (Abstract)	N
/LW/	F19	JP	07274807			10-24-1995	Japan	N
/LW/	F20	WO	95129996			11-09-1995	Europe	N
/LW/	F21		0 682 116			11-15-1995	Europe	N
/LW/	F22		1595-1994			04-01-1996	Chile	N
/LW/	F23		875-1994			05-08-1996	Chile	N
/LW/	F24		1363-1995			08-07-1996	Chile	N
/LW/	F25	JP	03164127			07-16-1999	Japan (Abstract)	N
/LW/	F26	JP	04207146A			07-29-1999	Japan (Abstract)	N
/LW/	F27	JP	04207145			07-29-1999	Japan (Abstract)	N
/LW/	F28		1363-95 (Patent application)			Apparent filing date, 09-07-1994	Chile	N
/LW/	F29		2,134,597 (Patent application)			04-30-1995	Canada	N
/LW/	F30		875-95 (Patent application)			Apparent filing date, 06-16-1995	Chile	N
/LW/	F31		2,151,978			12-18-1995	Canada	
/LW/	F32		2,157,718			03-08-1996	Canada	
/LW/	F33		2,224,143			12-12-1996	Canada	
/LW/	F34	EP	0,010,296		Toshiaki et al.	12-01-1982		
/LW/	F35	EP	0,468,731		Nobuyoshi et al.	01-29-1992		
/LW/	F36	EP	0,585,988 B1		Van Eljk et al.	09-03-1994		
/LW/	F37	GB	2,358,784		Jørn Borch Soe	08-08-2001		
/LW/	F38	JP	04-200339 (and English language abstract)		Mikiko, S.	07-21-1992		N

Examiner Signature	/Leslie Wong/	Date Considered	09/13/2007
-----------------------	---------------	--------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 4 of 10

### Complete if Known

Application Number	10/676,006
Filing Date	October 2, 2003
First Named Inventor	Jørn Borch SØE et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	59191.000009

### U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	U21					
	U22					

### FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Country	Translation (Y/N)
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	F39	JP	06-296467 (and English language abstract)		Masaaki, A.	10-25-1994		N
/LW/	F40	WO	94/04035		Olesen et al.	03-03-1994		
/LW/	F41	WO	96/39851		Jørn Borch Soe	12-19-1996		
/LW/	F42	WO	98/45453		Poulsen et al.	10-15-1998		
/LW/	F43	WO	99/31990		Schneider et al.	07-01-1999		
/LW/	F44	WO	00/32758		Bojsen et al.	06-08-2000		
/LW/	F45	WO	01/39602 A1		Soe	06-07-2001		
/LW/	F46	WO	02/00852		Tsutsumi et al.	01-03-2002		
/LW/	F47	WO	02/03805		Budolfson et al.	01-17-2002		
/LW/	F48	WO	02/065854		Ross et al.	08-29-2002		
/LW/	F49	WO	02/066622		Tsutsumi et al.	08-29-2002		
/LW/	F50	JP	61085158 (abstr)					
/LW/	F51	JP	1994000010444					
/LW/	F52	JP	7 274807					
/LW/	F53	JP	7 274807 A					
/LW/	F54	JP	03164127					
/LW/	F55	JP	04207145					

Examiner Signature	/Leslie Wong/	Date Considered	09/13/2007
-----------------------	---------------	--------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Atty. Docket: 59191.000009

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0037  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 5 of 10

**Complete if Known**

Application Number	10/676,006
Filing Date	October 2, 2003
First Named Inventor	Jørn Borch SØE et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	59191.000009

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	U23					
	U24					

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM- DD-YYYY	Country	Translation (Y/N)
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	F56	JP	04207146 A					
	F57	DE	4301904					

**NON-PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

Examiner Initials*	Cite No. <sup>1</sup>	
/LW/	F58	Bean and Hassid, 1956, J. Biol. Chem., 218: 425-436
/LW/	F59	Ikawa, 1982, Methods Enzymol., 89: 145-149
/LW/	F60	Sullivan et al., 1973, Biochemica et Biophysica Acta, 309:11-22
/LW/	F61	Rand, 1972, Journal of Food Science, 37:698-701
/LW/	F62	Bak et al., "A Method for Testing the Strengthening Effect of Oxidative Enzymes in Dough", presented at a symposium entitled "Wheat Structure, Biochemistry and Functionality", Reading UK, 10-12 April 1995
/LW/	F63	Christiansen, 1993, "Application of Oxidoreductases for Food Preservation" in Progress Report of R&D Projects and Concerted Actions published by the European Communities, Luxembourg, 1993, p. 32-36
/LW/	F64	Kerschensteiner, The Mechanism of Action and the State of Copper in Hexose oxidase, Thesis, 1978, p. iii-xiii
/LW/	F65	Perella, F.W., Analytical Biochemistry, 174:437-447 (1988)
/LW/	F66	RAAC Method 30-01A
/LW/	F67	"Enzyme Technology in Flour Milling and Baking", <i>Baking Industry Europe</i> (Alan Gordon, editor), S. Haarasilta and T. Pullinen (1993), pp. 49-52
/LW/	F68	"Enzyme Nomenclature 1984 (Recommendations of the Nomenclature Committee of the International Union of Biochemistry on the Nomenclature and Classification of Enzyme-Catalysed Reactions)" (1984), pages v, ix, and 50-51
/LW/	F69	"Glucose Oxidase: Production, Properties, Present and Potential Applications", <i>Soc. Chem. Ind. (London)</i> , (1961), L.A. Underkofler, p. 72-86
/LW/	F70	"Methods in Enzymology", <i>Biomass Part B Glucose Oxidase of Phanerochaete chrysosporium</i> , R.L. Kelley and C.A. Reddy (1988), 161, pp. 306-317

Examiner  
Signature

/Leslie Wong/

Date  
Considered

09/13/2007

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Unique citation designation number. <sup>3</sup> See attached Kinds of U.S. Patent Documents. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS



Atty. Docket: 59191.000009

TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/676,006
				Filing Date	October 2, 2003
				First Named Inventor	Jørn Borch SØE et al.
				Group Art Unit	Unassigned
				Examiner Name	Unassigned
				Attorney Docket Number	59191.000009
Sheet	6	of	10		

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	U25					
	U26					

NON-PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)		
Examiner Initials *	Cite No. <sup>1</sup>	
	F71	Definition of "Enzyme", Webster Dictionary, p. 1665
/LW/	F72	"Baking Science & Technology", E.J. Pyler (1982), vol. 1, pp. 314-316
/LW/	F73	"Novel Enzyme Combinations A New Tool to Improve Baking Results", <i>Agro-Industry Hi-Tech</i> , S. Haarasilta and T. Pullinen, (May/June 1992), p. 12-13
/LW/	F74	"Enzyme Nomenclature (Recommendations of the Nomenclature Committee of the International Union of Biochemistry and Molecular Biology on the Nomenclature and Classification of Enzymes)" (1992), page 56
/LW/	F75	"Enzyme Function", Experimental Report from Novo Nordisk, 3/13/97, 2 pages
/LW/	F76	<i>J. Chromatog.</i> , Knoll et al., 55 (1971), 425-428
/LW/	F77	"DEEO <sup>®</sup> " A glucose oxidase and catalase enzyme system product sheet from Miles laboratories- Enzymes from Miles (technical Information) (1976), 5 pages
/LW/	F78	"Enzymes in Food Processing", 2 <sup>nd</sup> Ed. by G. Reed, Universal Foods Corporation, Academic Press (1975), p. 222-229
/LW/	F79	"Properties and Applications of the Fungal Enzyme Glucose Oxidase", reprinted from "Proceedings of the International Symposium on Enzyme Chemistry", Tokyo and Kyoto, (1957) L.A. Underkofler, (1958), pp. 486-490
/LW/	F80	"The Oxidation of Glucose and Related Compounds by Glucose Oxidase from <i>Aspergillus Niger</i> ", <i>Biochemistry</i> , Pazur et al., Vol. 3(4), 1964, 578-583
/LW/	F81	"Technology of Cereals (with special reference to wheat)", 2 <sup>nd</sup> Ed., Pergamon Press Ltd. N. L. Kent, (1975), pp. iv-v, 48-49, and 72-73
/LW/	F82	"Glzyme <sup>™</sup> " product sheet from Novo Nordisk Enzyme Process Division, January 1994, 2 pages
/LW/	F83	Derwent Publications Ltd., London, GB; class D13, AN 73-30288u XP002012361 & JP, A48016612 (EISAI CO. LTD.)
/LW/	F84	Clare et al., 1991, <i>Bio/Technology</i> 9:455-460 [3]
/LW/	F85	Cregg et al., 1987, In: <i>Biological Research on Industrial Yeast</i> , Vol. II, Stewart, G.G. et al. (Eds.), pp. 1-18 [4]
/LW/	F86	Fernandez et al., 1992, <i>Analytical Biochemistry</i> , 201:255-264 [5]
/LW/	F87	Pedersen et al., 1996, <i>J. Biol. Chem.</i> 271:2514-2522 [10]
/LW/	F88	Sahn et al., 1973, <i>Eur. J. Biochem.</i> 37:250-256 [12]
/LW/	F89	Tschopp et al., 1987, <i>Bio/Technology</i> 5:1305-1308 [17]
/LW/	F90	Barkholt, V. and A.L. Jensen, 1989, <i>Amino Acid Analysis: Determination of Cysteine plus Half-Cysteine in Proteins after Hydrochloric Acid Hydrolysis with a Disulfide Compound as Additive</i> , <i>Analytical Biochemistry</i> , 177:318-322

Examiner Signature	/Leslie Wong/	Date Considered	09/13/2007
-----------------------	---------------	--------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.





Atty. Docket: 59191.000009

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 7 of 10

**Complete if Known**

Application Number	10/676,006
Filing Date	October 2, 2003
First Named Inventor	Jørn Borch SØE et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	59191.000009

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	U27					
	U28					

**NON-PATENT LITERATURE DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initials*	Cite No. <sup>1</sup>	
/LW/	F91	Fernandez, J. et al., 1994, An Improved Procedure for Enzymatic Digestion of Polyvinylidene Difluoride-Bound Proteins for Internal Sequence Analysis, Analytical Biochemistry, 218:112-117
/LW/	F92	Groppe, J.C. and Morse, D.E., 1993, Isolation of full-length RNA templates for reverse transcription from tissues rich in RNase and proteoglycans, Anal. Biochem., 210:337-343
/LW/	F93	Kerschensteiner, D.A. and Klippenstein, D.A., 1978, Purification Mechanism and State of Copper in Hexose Oxidase, Federation Proceedings 37:1816 abstract
/LW/	F94	Laemmli, U.K., 1970, Cleavage of structural Proteins during the Assembly of the Head of Bacteriophage T4, Nature (London), 227:680-685
/LW/	F95	Schägger, H. and von Jagow, G., 1987, Tricine-Sodium Dodecyl Sulfate-Polyacrylamide Gel Electrophoresis for the Separation of Proteins in the Range from 1 to 100 kDa, Analytical Biochemistry 166:368-379
/LW/	F96	Sock, Jr. and Rohringer, R., 1988, Activity Staining of Blotted Enzymes by Reaction Coupling with Transfer Membrane-Immobilized Auxiliary Enzymes, Analytical Biochemistry 171:310-319
/LW/	F97	Yeh, K-W, Juang, R.H. and Su, J-C, A Rapid and efficient method for RNA isolation from plants with high carbohydrate content, Focus 13 (3):102-103, 1991
/LW/	F98	Maes et al., Analytica Chimica Acta, 284 (1993) 281-290
/LW/	F99	Sambrook, J., Fritsch, E.F. and Maniatis, T., 1989, Molecular Cloning, A Laboratory Manual 2 <sup>nd</sup> Ed. Cold Spring Harbor Laboratory Press, Cold Spring Harbor, NY
/LW/	F100	PCT International Search Report for PCT/DK96/00238, issued 04/11/96
/LW/	F101	International Search Report from the International Searching Authority in PCT/DK96/00239 issued 9/11/96
/LW/	F102	The Examiner's Report on Application for Patent or Invention (Chinese Application No. 959-96) and English translation thereof
/LW/	F103	Dowling et al., "Hexose Oxidation by an enzyme system of Malleomyces Pseudomallei", Journal of Bacteriology (1956) 72: 555-560
/LW/	F104	Bean et al., "Carbohydrate Metabolism of Citrus Fruits", Journal of Biological Chemistry (1961) 236: 1235-1240
/LW/	F105	Witteveen, C.F.B.: Thesis "Gluconate formation and polyol metabolism in Aspergillus niger", selected pages (1993)
/LW/	F106	AACC Memo 3470
/LW/	F107	Ellman, George L.: "A Colorimetric Method for Determining Low Concentrations of Mercaptans", Archives of Biochemistry and Biophysics (1958) 74: 443-450
/LW/	F108	U. S. Patent Application No. 09/824,053, filed on July 12, 1996, entitled "Recombinant Hexose Oxidase, A Method of Producing Same And Use of Such Enzyme," Inventor(s): Peter Stougaard et al.

Examiner Signature	/Leslie Wong/	Date Considered	09/13/2007
-----------------------	---------------	--------------------	------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Atty. Docket: 59191.000009

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0037

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 8 of 10

**Complete if Known**

Application Number	10/676,006
Filing Date	October 2, 2003
First Named Inventor	Jørn Borch SØE et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	59191.000009

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	U29					
	U30					

**NON-PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

Examiner Initials *	Cite No. <sup>1</sup>	
/LW/	F109	Poulsen, C., et al., "Purification and Characterization of a Hexose Oxidase with Excellent Strengthening Effects in Bread", <i>Cereal Chem.</i> , 75(1):51-57 (1998).
/LW/	F110	<del>"Effect of Different Hexose Oxidase and Other Oxide Reductases in Dough" Experimental Data Submitted by Applicants in European Counterpart Application 96917308"</del>
/LW/	F111	Krog, N.J., "Dynamic and Unique Monoglycerides", <i>Cereal Foods World</i> , 24(1): 10-11 (1979).
/LW/	F112	Matos, A.R., et al., "A Novel Patatin-like Gene Stimulated by Drought Stress Encodes a Galactolipid Acyl Hydrolase", <i>FEBS Letters</i> , 491: 188-192 (2001).
/LW/	F113	Withers-Martinez, C., et al., "A Pancreatic Lipase with a Phospholipase A1 activity: Crystal Structure of a Chimeric Pancreatic Lipase-Related Protein 2 from Guinea Pig", <i>Structure</i> , 4(11): 1363-1374 (1996).
/LW/	F114	Cordle, R.A., "The Hydrophobic Surface of Colipase Influences Lipase Activity at an Oil-Water Interface", <i>Journal of Lipid Research</i> , 39: 1759-1767 (1998).
/LW/	F115	Sahsah, Y., et al., "Purification and Characterization of a Soluble Lipolytic Acylhydrolase from Cowpea ( <i>Vigna unguiculata</i> L.) Leaves", <i>Biochimica et Biophysica Acta</i> , 1215: 66-73 (1994).
/LW/	F116	O'Sullivan, J., et al., "A Galactolipase Activity Associated with the Thylakoids of Wheat Leaves ( <i>Triticum aestivum</i> L.)", <i>J. Plant Physiol.</i> , 131:393-404 (1987).
/LW/	F117	Carriere, F., et al., "Pancreatic Lipase Structure-Function Relationships by Domain Exchange," <i>Biochemistry</i> , 36: 239-248 (1997).
/LW/	F118	Bornscheuer, U.T., "Lipase-Catalyzed Syntheses of Monoacylglycerols", <i>Enzyme and Microbial Technology</i> , 17: 578-586 (1995).
/LW/	F119	Hou, C.T., "pH Dependence and Thermostability of Lipases from Cultures from the ARS Culture Collection", <i>Journal of Industrial Microbiology</i> , 13:242-248 (1994).
/LW/	F120	Villeneuve, P., et al., "Lipase Specificities: Potential Application in Lipid Bioconversions", <i>Inform</i> , 8(6): 640-650 (1997).
/LW/	F121	Cammann, K., et al., "Chemical Sensors and Biosensors-Principles and Applications", <i>Angew. Chem. Int. Ed. Engl.</i> , 30: 516-539 (1991).
/LW/	F122	Allen, R.M. et al., "Low-Level Electrochemical Detection of Glucose Oxidase and a Glucose Oxidase Conjugate", <i>Biosensors and Bioelectronics</i> , 10:621-631 (1995).
/LW/	F123	Wiseman, A., "Immobilization of Glucose Oxidase into Membranes as Sensors for Food Analysis", <i>Elsevier Science Publishers</i> , (1987).
/LW/	F124	Wilson, R., et al., "Glucose Oxidase: An Ideal Enzyme", <i>Biosensors and Bioelectronics</i> , 7:165-185 (1992).
/LW/	F125	Raba, J., et al., "Glucose Oxidase as an Analytical Reagent", <i>Critical Reviews in Analytical Chemistry</i> , 25(1):1-42 (1995).
/LW/	F126	Volc, J., et al., "Glucose-2 Oxidase Activity in Mycelial Cultures of Basidiomycetes", <i>Folia Microbiol.</i> , 30:141-147 (1985).
/LW/	F127	Giffhorn, F., "Fungal Pyranose Oxidases: Occurrence, Properties and Biotechnical Applications in Carbohydrate Chemistry", <i>Appl. Microbiol. Biotechnol.</i> , 54:727-740 (2000).

Examiner  
Signature

/Leslie Wong/

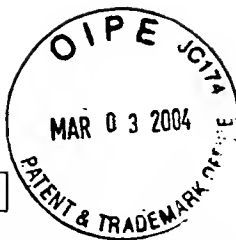
Date  
Considered

09/13/2007

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup> Unique citation designation number. <sup>3</sup> See attached Kinds of U.S. Patent Documents. <sup>4</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>5</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>7</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Atty. Docket: 59191.000009

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0037  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 9 of 10

**Complete if Known**

Application Number	10/676,006
Filing Date	October 2, 2003
First Named Inventor	Jørn Borch SØE et al.
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	59191.000009

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	U31					

**NON-PATENT LITERATURE DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

Examiner Initials*	Cite No. <sup>1</sup>	
	F128	<del>Certificate of Analysis for Maltose Monohydrate, SIGMA</del>
/LW/	F129	Lin, Shuen-Fuh et al., "Purification and Characterization of a Novel Glucooligosaccharide Oxidase from <i>Acremonium strictum</i> T1", <i>Biochimica et Biophysica Acta</i> , 1118:41-47 (1991).
/LW/	F130	Pazur, J.H., et al., "Comparison of the action of Glucoamylase and Glucosyltransferase on D-Glucose, Maltose, and Malto-Oligosaccharides," <i>Carbohydrate Research</i> , 58:193-202 (1977).
/LW/	F131	Qi Si, J., "New Enzymes for the Baking Industry", <i>Food Tech Europe</i> , 3(1):60-64 (1996), Novo Nordisk Ferment Ltd.
/LW/	F132	Weipert, D., "Rheologie von Roggenteigen., II. Der Einfluß der Enzyme unterschiedlicher Spezifität auf das rheologische Verhalten des Teiges", <i>Getreide, Mehl Und Brot</i> , 26(10):275-280 (1972); and English language translation of Abstract.
/LW/	F133	Nicolas, J., "Mise au Point sur l'action d'enzymes d'oxydoreduction en technologie boulangère. La maturation des farines de blé tendre et le pétrissage des pâtes", <i>Ann. Technol. Agric.</i> , 28(4):445-468 (1979); and English language translation of Abstract.
/LW/	F134	Mine, Y., "Application of the Enzymatic Methods to the Determination of Contaminated Yolk in Egg White", <i>Food Research International</i> , 29(1):81-84 (1996).
/LW/	F135	Pub. No. 06-296467 (JP 6296467), 10/25/1994, Section No. FFFFFF, Vol. 94, No. 10, Pg. FFFFFF, FF, FFFF (FFFFFFFF) believed to be Patent Abstracts of Japan Vol. 095, No. 001.
	F136	<del>Patent Abstracts of Japan Vol. 016, No. 638 (C-1004)</del>
/LW/	F137	Marion Didier, et al., "Lipids, Lipid-Protein Interactions and the Quality of Baked Cereal Products," <i>Interactions: The Keys to Cereal Quality</i> , (ed. Hamer & Hosenev), Chapter 6, pp. 131-167 (1998).
/LW/	F138	Conference May 6-8, 1999 in Santorini, Greece, "Lipases & Lipids Structure, Function and Biotechnological Applications," Slides presented by Charlotte Poulsen.
/LW/	F139	C.H. Poulsen, et al., "Effect and Functionality of Lipases in Dough and Bread," <i>The First European Symposium on Enzymes and Grain Processing</i> , pp. 204-214 (1997).
/LW/	F140	D. Marion, et al., "Wheat Lipids and Lipid-Binding Proteins: Structure and Function," <i>Wheat Structure Biochemistry and Functionality</i> , ed. Scholfield JP, pp 245-260 (1995).
/LW/	F141	"Unique Chance for Better Bread," <i>Direct, A Newsletter from Danisco Ingredients</i> , (1996).
	F142	
	F143	
	F144	
	F145	
	F146	

Examiner  
Signature

/Leslie Wong/

Date  
Considered

09/13/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231.

**DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.